

## Answer

**1**st Kyu - **1** 

1	$a = -1, 0, \frac{3}{4}, 1 \pm \sqrt{5}i$
2	$n^2(n+1)^2(n+2)^2$
3	131 108
4	$\begin{pmatrix} -18\\ 9\\ 9 \end{pmatrix}$
•	$\frac{8\sqrt{6}}{3}$

Please fill in the box.(the bold part is mandatory)

**Examinee Number** 

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Put your sticker for Section 1	Date of Birth (year) (month) (da	ay)
with the bar code here.	Gender (Check the appropriate box) Male Female Age	
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Name

The Mathematics Certification Institute of Japan

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	$f'(x) = \frac{1}{1+x^2}$	
5	$f''(-\sqrt{3}) = \frac{\sqrt{3}}{8}$	
6	$256x^{12}-113x^8+18x^4-1$	
7	$\frac{1}{2}$	